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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/846,975	05/01/2001	John S. Packer	ADAPP190	4949
25920	7590	10/08/2003	EXAMINER	
MARTINE & PENILLA, LLP 710 LAKEWAY DRIVE SUITE 170 SUNNYVALE, CA 94085			KNOLL, CLIFFORD H	
			ART UNIT	PAPER NUMBER
			2189	2

DATE MAILED: 10/08/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/846,975

Applicant(s)

PACKER ET AL.

Examiner

Clifford H Knoll

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____. | 6) <input type="checkbox"/> Other: _____. |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 20, 21, 25, 26, 28 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The recitation, in claim 20 of "the expander adapted to receive", in claim 21, "the expander includes a first I/O interface and a second I/O interface, the first and second I/O interfaces being arranged to couple", in claim 25 of "the ... circuit includes", in claim 26 of "buffers are arranged to drive", and in claim 28 of "the segments are SCSI bus segments" constitutes unclear recitation, because it is not clearly established what further limitations are intended for the "method for isolating bus segments" that is being claimed. It is not clear what statutory class of invention is being recited by the apparently apparatus elements.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 20, 21, 25, 26, 28, rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The instant claims appear to recite both method steps and apparatus limitation.

"[A] claim which is intended to embrace both product or machine and process is precluded by language of 35 USC 101, which sets forth statutory classes of invention in alternative only, and is also invalid under 35 USC 112, second paragraph, since claim which purports to be both machine and process is ambiguous and therefore does not particularly point out and distinctly claim subject matter of invention." (See *Ex parte Lyell* 17 USPQ2d 1548).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-28 rejected under 35 U.S.C. 102(e) as being anticipated by Benson (US 6567879).

Regarding claim 1, Benson discloses an expander device for isolating segments with a first I/O interface circuit being adapted to interface input and output communication signals with the first bus segment (e.g., col.3, lines 9-11); a second I/O

interface circuit configured to be coupled to a second bus segment and being adapted to interface the input and output communication signals with the second bus segment (e.g., col.3, lines 12-14); and an expander controller coupled to communicate the input and output communication signals between the first and second I/O interface circuits, controlling communication between bus segments, including a segment controller adapted to generate a first signal to disable output of the communication signals from the first and second I/O interface circuits to the first and second bus segments (e.g., col.3, lines 27-31).

Regarding claim 2, Benson also discloses where the disabling isolates the bus segments in an isolation mode (e.g., col.3, lines 29-31 "split bus mode").

Regarding claim 3, Benson further the expander device is adapted to receive the communication signals from the first and second bus segments while in isolation mode (e.g., col.3, lines 48-51).

Regarding claim 4, Benson still further discloses where the segment controller generates the first signal in response to an isolation command received from the first bus segment (e.g., col.2, lines 5-15).

Regarding claim 5, Benson still further discloses deasserting the first signal to exit the isolation mode (e.g., col.2, lines 9-11).

Regarding claim 6, Benson still further discloses deasserting when the second bus segment is in a bus free state (e.g., col.2, lines 9-11).

Regarding claim 7, Benson still further discloses the input and output buffers (e.g., col.3, lines 26-29).

Regarding claim 8, Benson still further discloses driving the communication signals for input and output (e.g., col.3, lines 23-26, Figure 1, items 44, 46).

Regarding claim 9, Benson still further discloses the first signal disables the first and second output buffers to disable the output (e.g., col.3, lines 23-26).

Regarding claim 10, bus segments are SCSI bus segments and the expander controller is a SCSI controller (e.g., col. 2, lines 46-49).

Regarding claim 11, Benson discloses the expander and method where a first I/O interface circuit is adapted to interface input and output communication signals with the first bus segment (e.g., col.3, lines 9-11); a second I/O interface circuit is adapted to interface the input and output communication signals with the second bus segment (e.g., col.3, lines 12-14); and an expander controller coupled to communicate the input and output communication signals between the first and second I/O interface circuits, controlling communication between bus segments, including a segment controller adapted to generate a first signal to disable output of the communication signals from the first and second I/O interface circuits to the first and second bus segments thereby isolating first and second SCSI I/O interface circuits to the first and second SCSI bus segments so communication signals received on one segment are not transmitted on the other (e.g., col.3, lines 27-31).

Regarding claim 19, Benson discloses receiving by the expander an isolation command from a host computer on the first bus segment, the isolation command being configured to instruct the expander to isolate the first bus segment from the second bus segment and configuring the expander operating to prevent communication signals

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received on one bus segment from being output onto the other bus segment (e.g., col.3, lines 14-18).

Regarding claims 12 and 20, Benson also the expander device is adapted to receive the communication signals from the first and second bus segments while in isolation mode (e.g., col.3, lines 48-51).

Regarding claims 13 and 22, Benson also discloses where the segment controller generates the first signal in response to an isolation command received from the first bus segment (e.g., col.2, lines 5-15).

Regarding claims 14 and 23, Benson further discloses deasserting the first signal to exit the isolation mode (e.g., col.2, lines 9-11).

Regarding claims 15 and 24, Benson still further discloses deasserting when the second bus segment is in a bus free state (e.g., col.2, lines 9-11).

Regarding claims 16 and 25, Benson still further discloses the input and output buffers (e.g., col.3, lines 26-29).

Regarding claims 17 and 26, Benson still further discloses driving the communication signals for input and output (e.g., col.3, lines 23-26, Figure 1, items 44, 46).

Regarding claims 18 and 27, Benson still further discloses the first signal disables the first and second output buffers to disable the output (e.g., col.3, lines 23-26).

Regarding claim 21, Benson also discloses a first I/O interface (e.g., col.3, lines 9-11); a second I/O interface (e.g., col.3, lines 12-14); and an expander controller

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coupled to communicate the input and output communication signals between the first and second I/O interface circuits, controlling communication between bus segments, including a segment controller adapted to generate a first signal to disable output of the communication signals from the first and second I/O interface circuits to the first and second bus segments thereby isolating first and second SCSI I/O interface circuits to the first and second SCSI bus segments (e.g., col.3, lines 27-31).

Regarding claim 28, bus segments are SCSI bus segments and the expander controller is a SCSI controller (e.g., col. 2, lines 46-49).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Monia (US 6185651) discloses a particular SCSI expander with isolated SCSI buses (e.g., col.2, lines 56-68). Fredin (US 6529963) discloses selectively isolated I/O buses (e.g., col.4, lines 23-27). Wanger (US 5615345) discloses multiple isolated SCSI buses.


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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Clifford H Knoll whose telephone number is 703-305-8656. The examiner can normally be reached on M-F 0630-1500.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark H Rinehart can be reached on 703-305-4815. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-2100.

chk



MARK H. RINEHART
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